CLAIMS

1-17. (Cancelled)

- 18. (currently amended) A method for obtaining extracted DNA from gum samples comprising one or more of guar gum (E 412) and locust bean gum (E 410), comprising the steps of:
- i) contacting a gum sample comprising DNA and one or more of guar gum (E 412) and locust bean gum (E 410) with an aqueous solution to form an extraction mixture;
- ii) agitating the extraction mixture at a
 temperature between O°C and 100°C for a time period
 sufficient to permit extraction of DNA from the gum sample
 into the aqueous solution;
 - iii) separating the extraction mixture to obtain
 an aqueous solution containing extracted DNA and another
 phase; and
 - iv) recovering a sample of the aqueous solution containing extracted DNA; and
 - v) using PCR to amplify the extracted DNA using one or more primers having a sequence of SEQ ID NO:4, SEQ

Serial No. 10/009,980

ID NO:6, a portion of SEQ ID NO:7 or a portion of SEQ ID NO:9.

- 19. (previously presented) The method according to claim 18 wherein said aqueous solution is a buffered aqueous solution.
- 20. (previously presented) The method according to claim 18 wherein said aqueous solution further comprises acetonitrile or ethanol.
- 21. (previously presented) The method according to claim 18 wherein the extraction mixture is agitated at room temperature.
 - 22. (previously presented) The method according to claim 18 wherein the extraction mixture is separated by decantation.
 - 23. (previously presented) The method according to claim 18 wherein the extraction mixture is separated by centrifugation.

Serial No. 10/009,980

24. (previously presented) The method according to claim 23 wherein the centrifugation is at 15,000 \times g.

25-26. (cancelled)